Application Serial No.: 10/693,737 Attorney Docket No.: 09350.0001-00

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

(Original) An adjustable eddy electrostatic precipitator, comprising:
 a main body, having an inner space with an air guiding plate of helical shape, an
 entrance for air and an exit for air;

an electrode array close to said entrance, ionizing particles floating in air;
an adjustable opening at said exit, having an adjustable aperture; and
a precipitating device, connected with a bias high voltage, for adsorbing ionized particles.

- (Original) The adjustable eddy electrostatic precipitator according to claim
   wherein a fan is mounted at said entrance or said exit.
- 3. (Currently amended) The adjustable eddy electrostatic precipitator according to claim 1, wherein said inner space of said main body is shaped like a truncated cone of truncated cone shape, with said air guiding plate being shaped like a helix of helical shape with decreasing diameter.
- 4. (Currently amended) The adjustable eddy electrostatic precipitator according to claim 1, wherein said inner space of said main body is shaped like a cylinder of cylinder shape, with said air guiding plate being shaped like a helix of helical shape with constant diameter.

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of cylinder shape, with said air guiding plate being shaped like a helix of helical shape with constant diameter.

- 5. (Original) The adjustable eddy electrostatic precipitator according to claim 1, wherein said adjustable opening is an iris diaphragm with an adjustable aperture.
- 6. (Original) The adjustable eddy electrostatic precipitator according to claim 1, wherein said adjustable opening is a slit opening with an adjustable width.
- 7. (Original) The adjustable eddy electrostatic precipitator according to claim 6, wherein said adjustable opening has opaque plates gliding between a pair of rails.
- 8. (Original) The adjustable eddy electrostatic precipitator according to claim 1, wherein said electrode array has a plurality of pointed electrodes.
- (Original) The adjustable eddy electrostatic precipitator according to claim
   wherein said electrode array has a plurality of rack-shaped linear electrodes.
- 10. (Original) The adjustable eddy electrostatic precipitator according to claim 1, wherein said electrode array has a grid.
- 11. (Original) The adjustable eddy electrostatic precipitator according to claim 1, wherein said precipitating device has a flat surface facing said main body.

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12. (Currently amended) The adjustable eddy electrostatic precipitator according to claim 1, wherein said precipitating device is shaped like an obtuse cone of an obtuse cone shape.

- 13. (Currently amended) The adjustable eddy electrostatic precipitator according to claim 1, wherein said precipitating device is shaped like a cylinder of cylinder shape.
- 14. (Original) The adjustable eddy electrostatic precipitator according to claim 5, wherein said adjustable opening has a plurality of circular plates.
- 15. (Original) The adjustable eddy electrostatic precipitator according to claim 14, wherein each of said circular plates has a fixed bolt at a fixed position on said main body and a movable bolt revolving around said fixed bolt for varying said adjustable aperture.
- 16. (Original) The adjustable eddy electrostatic precipitator according to claim13, wherein said precipitating device has an axial wire connected with high voltage.
- 17. (Original) The adjustable eddy electrostatic precipitator according to claim1, wherein said air guiding plate covers at least one full twist.

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18. (Original) The adjustable eddy electrostatic precipitator according to claim 8, wherein said pointed electrodes of said electrode array are set on a section of said air guiding plate close to said entrance.

19. (Original) The adjustable eddy electrostatic precipitator according to claim 9, wherein said rack-shaped electrodes of said electrode array are set on a section of said air guiding plate close to said entrance.